

Process of Natural Selection
Creator of the World
&
Controller of the World



Venerable Punnaji: So now we also have a very interesting show and it'll be there. It'll be very interesting because we have been talking about Evolution, and the first time Evolution was brought into the world was by Charles Darwin. And so this is the story of Charles Darwin, which has been acted out; the people who are acting they're not real Charles Darwin; they are actors, so actors acting out and the story of Charles Darwin is there. So it's like looking at the movie picture.

Struggle for Existence



- ❖ Nature does not revolve around man, so man too, despite our more evolved brain and sophisticated science and technology, is subject to the laws of natural selection – this is the struggle for existence;
- ❖ The smaller and simpler the organism, the faster the process of evolution. While the human species takes years to evolve, bacteria and viruses evolve within minutes.

[Showing how natural selection plays out in the life of HIV viruses and the people they infect.]

[4 min 47 sec]

Billy Tan: Okay. The first clip basically shows when Charles Darwin first came up with the idea of Struggle for Existence because of Natural Selection. The second half of the clip you will actually see how Struggle for Existence is played out between the HIV virus and the human species because the HIV virus is Struggling for Existence at the expense of the human host, while at the same time the human is suffering, is Struggling for Existence at the expense of killing the HIV virus.

Venerable Punnaji: One very important thing is that, we are, before we were born in this world, the viruses were born in the world and even the bacteria, so we are really living in the world of bacteria and viruses. And now people are trying to attack the viruses with drugs, and although they try to attack the viruses, the viruses can now conquer the guts also. They change themselves and the Evolution takes place very quickly with the viruses and bacteria, quicker than our Evolution. So that's very interesting to understand that.

Billy Tan: The smaller and simpler the organism the faster the process of Evolution, while the human species takes years, centuries, or Millennia to evolve. Bacteria and viruses evolve within minutes.

"Struggle For Existence"



Charles Darwin: *Natural tendency of mankind is to reproduce. Humans can double their numbers every 25 years.*

Associate: *But they don't. A struggle for resources slows growths and death and disease, war and famine check the population. I know the argument.*

Charles Darwin: *Yes! But don't you see exactly the same struggle takes place throughout nature? I don't know why I didn't make the connection before. Why we not overrun with insects and frogs, giving the rates which they reproduce, a number of eggs produce by each and every female.*

Associate: *Nature's broom sweeps away the ugly ducklings, the runts.*

Charles Darwin: *Yes! Yes! But it is not that simple. It's not that simple. Sometimes it's the ugly ducklings that are better adapted to this situation of life. They have longer legs and can run faster. They have bigger beaks that can crack hardened nuts and seeds in harsh winters. They survived, have more offspring; nature selects them to pass on their traits to future generations.*

Associate: *And where do we fit in?*

Charles Darwin: *Well, the sun's not revolved around the earth. Nature does not revolve around men. Men must fall into nature's cauldron. He's no deity, no exception. Once you accept the species can pass into one another the whole fabric tosses in force.*

Associate: *They'll burn you with the stake for this.*

Charles Darwin: *Yes.*

Associate: *But now you have a theory. So I said, "Don't come down the ladder, mother, I've taken it away." Good evening.*



Darwin's work began with the observation that individuals differ from each other and these minute differences Darwin believed might be advantageous. It might give each individual an edge when it came to getting food or finding a place to survive in nature.









Darwin realized that in nature individual organisms compete for limited resources.

Those with some kind of advantage in coloration, for example, or in speed or in vision are more likely to survive and reproduce and pass on these advantages to their offspring. Those who are less fit will not succeed. Darwin called it Natural Selection because the forces of nature select which organisms will survive.



The survivors will be those whose variation fortuitously adapts them better to changing local environments, and then because they pass on those traits to their offspring, the population changes; that's Natural Selection, that is all it is. It is not a principle of progress; it's just the principle of local adaptation. You don't make better creatures in any cosmic sense; you make creatures that are better suited to the changing climates of the local habitats. That's it.





Darwin couldn't actually see Natural Selection acting in real-time, but today scientists can by observing the Evolution of HIV, the virus that causes AIDS.

Jeff Gustavson has been infected with HIV for over a decade. He takes a host of medications but to little avail; the virus keeps adapting, evolving into new strains that evade the drugs.



There's a pervasive feeling that all you have to do is take your medicine and you'll be okay and that's really isn't the case, you know. HIV has a capacity to evolve no matter what you give it.



There are 19 HIV drugs on the market today, and of those 19 I've already been through 14 of them.



Clarence Johnson too is locked in the daily struggle against the rapidly evolving virus.

Sometimes I feel like I'm fighting a losing battle. I haven't given up yet but there have been times I just want to just lay down and give up, but um I can't leave my family behind.

On The Origin of Species



- ❖ Charles Darwin had completed the first draft of his book "On The Origin of Species" in the 1830's and intended to have it published only after his death, out of deep respect for his wife's strong religious beliefs in the Christian faith;

[3 min 24 sec]

The next clip is when Charles Darwin has completed the first draft of his book "On the Origin of Species" by way of Natural Selection. He actually completed it 20 years before it was published and in fact he did not intend to have it published because of his deep respect and love for his wife; the wife is a very strong Christian. So because he knew that if he published the book he would hurt the wife; he decided to tell the wife he does not want to publish the book until after he dies.



Emma Darwin: *What is it?*

Charles Darwin: *I've completed a sketch of my species theory. I believe it's considerable step in science. If anything should happen to me.*

Emma Darwin: *What do you mean?*

Charles Darwin: *if I should die.*

Emma Darwin: *Die? Charles for goodness sake!*

Charles Darwin: *Please my love it's important. If anything should happen to me, I'd like you to see to it that it gets published; 400 pounds should be enough to see it printed and promoted.*

Emma Darwin: *Nothing's going to happen to you.*

Emma Darwin You say here that the human eye may possibly have been acquired by gradual selection of slight but in each case useful deviation.

Charles Darwin: Yes!

Emma Darwin: That's a very great assumption Charles.

Charles Darwin: If I'm wrong about that, I'm wrong about everything; my entire theories are in ruins.

Emma Darwin: Can your theory account for the way my eyes and ears and hands and heart combined to reproduce the sounds that Chopin heard in his head? Isn't that a God giving gift?

Charles Darwin: Might giving, but not I think by God.

Emma Darwin: You're a man of science. You don't want to believe anything until it's proved. But some things are beyond proof. It would be a nightmare to me if I thought we didn't belong to each other forever in heaven.



Emma was a sincere believer in the Christian Plan of Salvation, and that those who trusted in Jesus and his resurrection from the dead would spend eternity in heaven. She saw that her husband's speculations about the origins of species and of humanity would jeopardize the Christian Plan of Salvation. God was being made with remote in her husband's Universe. Now if nature by itself, unaided by God, could make an eye, then what else couldn't nature do? Nature could do anything; it could make everything.



In Darwin's day the very existence of an organ of extreme perfection like the eye was taken by many as proof of God; it's proof of the designer.

How else could all of the intricate organs and substructures of the eye have come together in just the right way to make vision so possible and so perfect? But it turns out the eye isn't exactly perfect after all. In fact the eye contains profound optical imperfections, and those imperfections or proof in a sense of the evolutionary ancestry of the eye.



Eyes are imperfect because Evolution does not create things the way a designer or an artist does. Natural Selection simply favors random changes that make an organism more fit to survive, and imperfections in design often results from Evolutions constant tinkering.

Death of Annie Darwin



- ❖ The struggle for existence dealt Charles and Emma Darwin a severe blow when their beloved daughter, Anne, unexpectedly died of typhoid fever at the age of 10 in 1851;
- ❖ The death of Annie so devastated Charles Darwin that it literally put an end to his faith in the Creator God.

[1 min 6 sec]

In the year 1851 Charles and Emma Darwin, they lost their daughter, age 10. She died suddenly of typhoid fever, and the death of Annie Darwin actually devastated Charles Darwin so much, he actually completely lost faith in God, and that was one of the promptings for him to publish his book before his death.

"Death of Anne Darwin"





For Annie's death did to Darwin's Faith was mainly to destroy Christianity. He could no longer see that a good God ordered and superintendent all of the events of human life and of the universe, and he believed that she did not deserve punishment by God or by Nature either. She'd simply fallen victim to the Struggle for Existence, the amoral, purposeless struggle that ran according to laws of nature.





Darwin certainly didn't think that Evolution spoke either for or against the un-provable existence of God or a form of God. He didn't desire to cast disparagement on anyone's religious convictions; he regarded it as a private matter, which he was never able to hold with conventional zeal following the tragedy of his wife.

The Darwinian God



- ❖ Modern day scientists brought up with strong religious beliefs in the Creator God face very strong “cognitive dissonance” of maintaining their religious views while at the same time producing indisputable evidence of evolution and various aspects of determinism that disproved creationism;
- ❖ This is the story of Kenneth Miller, a cellular biologist researching in the process of evolution, who managed to reconcile this sense of “cognitive dissonance”.

[4 min 59 sec]

The irony of what you've just seen is one of the scientists who spoke about the imperfection of the eye which therefore is not a creation of God. Funny thing is he is himself a very staunch Christian who believes in the Creator God. At the same time he's also a Cellular Biologist researching in the Process of Evolution, and this is actually showing how he managed to reconcile this Cognitive Dissonance, where he believes in the Creator God. At the same time he's producing evidence that prove Determinism and not Creationism.

"The Darwinian God"





Today's scientists hold all conceivable views on religion from atheism to agnosticism to a general spirituality, and many like Biologist, Ken Miller, adhered to very traditional beliefs.

I'm an orthodox Catholic and I'm an orthodox Darwinist. My idea of God is Supreme Being who acts in concert with the principles and the ideas that Darwin explained to us about the "Origin of Species". My students often asked me, "You say you believe in God, but what kind of God, is it a fashionable New Age god, a pyramid power kind of God, do you think like some scientists do that God is the sum total of the laws of physics?" And I shake those off and say that, "My religious belief is entirely conventional."

It surprises students very often that anyone could say that that kind of very traditional conventional religious belief could be compatible with Evolution, but it is. I find this absolutely wonderful consistency with what I understand about the universe from science and what I understand about the universe from faith.





Tennessee premiere morning radio talk show the Hallerin Hilton Hill Morning Show on NewsTalk 99 WNOX AM FM Loudon Knoxville.

12 past the hour 6 o'clock; it's my pleasure to welcome to the broadcast this morning Dr. Kenneth Miller; he's a professor of biology at Brown University. His book is entitled "Finding Darwin's God: a Scientist's Search for Common Ground between God and Evolution". He's in town tonight.

Let me ask you this, as a Cellular Biologist, when in your experience are you studying something, reading something, or doing some research, when do you come to the point where you go that's God?



As an experimental scientist I don't find God in the insufficiency of science to explain things; in other words, I don't find God in ignorance; I don't find God because we say well we can't explain that that must be something that God is doing.



But what did god do? Did he just create some kind of primordial soup and say go.



Well a long time ago people were sufficiently unknowing of how things worked in the natural world to see when the sun moved across the sky; they imagined that God had to push that sun across the sky. And gradually we began to realize that the world works according to physical laws. Science investigated those laws, um. So what room is there for God in the present day life? Well I think if you ask people who are believers, “How does God act?” They would say, “He acts in a variety of ways: he answers our prayers, he inspires us.” No doubt there are events that take place that are part of what some people might call God's plan. And what I would suggest is if you look back in Earth's history; if God is working today in concert with the laws of nature with physical laws so he probably worked in concert with him in the past in a sense. In a sense he is the guy who made up the rules of the game and he manages to act within those rules.



For Miller and millions of followers of all major religions notions of God and Evolution are fully compatible, but not everyone agrees.

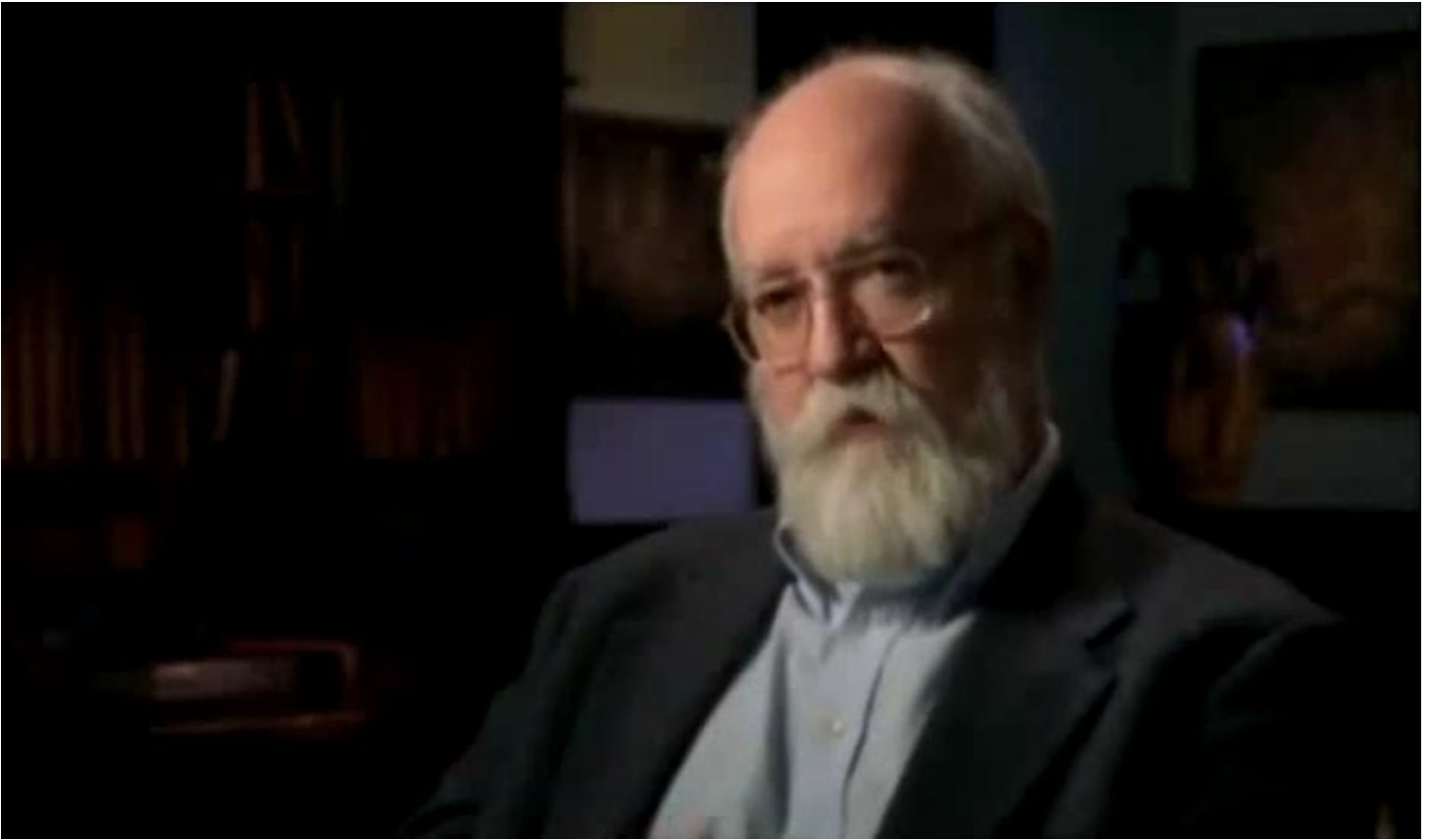


When we replace the traditional idea of God, the Creator, with the idea of the process of Natural Selection doing the creating, the Creation is as wonderful as it ever was, all that great design work had to be done, it just doesn't, wasn't done by an individual, it was done by this huge process distributed over billions of years.





God created man in his image. In the image of God, he created him; male and female he created them.



Whereas people used to think of meaning coming from on high and being ordained from the top down; now we have Darwin saying, “Now all of this design can happen, all of this purpose can emerge from the bottom up, without any direction at all.” And that's a very unsettling thought for many people.



In Darwin's day science and politics and religion, where all of the peace, when you talked about the origins of life and of species, astronomy could go along pretty well because it's testified to the wisdom and power of God and holding the planets in place. But the idea of Evolution or transmutation, people said with a snarl put in jeopardy the whole established social order.

The Ennobling Perspective



- ❖ Kenneth Miller has arrived at an “Ennobling Perspective” in order to reconcile his faith in the Creator God with his work in Evolutionary Science;
- ❖ This is an excellent example illustrating how maintaining the right “perspective” to our realities brings peace and harmony into our lives, even when in the midst of apparently contradicting paradigms.

So the interesting thing about this scientist, Kenneth Miller, is how he arrived at this resolving this Cognitive Dissonance by adopting what we call the Ennobling Perspective. Because this is an excellent example illustrating how maintaining the right perspective to our realities in life helps bring peace and harmony into our lives, even when in his case, in the midst of apparently contradicting paradigms of finding proof of Determinism while at the same time believing in the Creator God.





The similarities that we have with our primate relatives are extraordinary. We share so much of our DNA, we share so much of our morphology, we even share our blood types, but for all of those similarities, there are striking differences.






I think the reason for this is really very simple, and that is the line of Evolution that led to us; led for reasons which we are only beginning to understand to an explosive development of mental capacity. And what clearly happened is that Natural Selection favored the Evolution of organisms that could communicate, that could manipulate symbols, then could construct language.



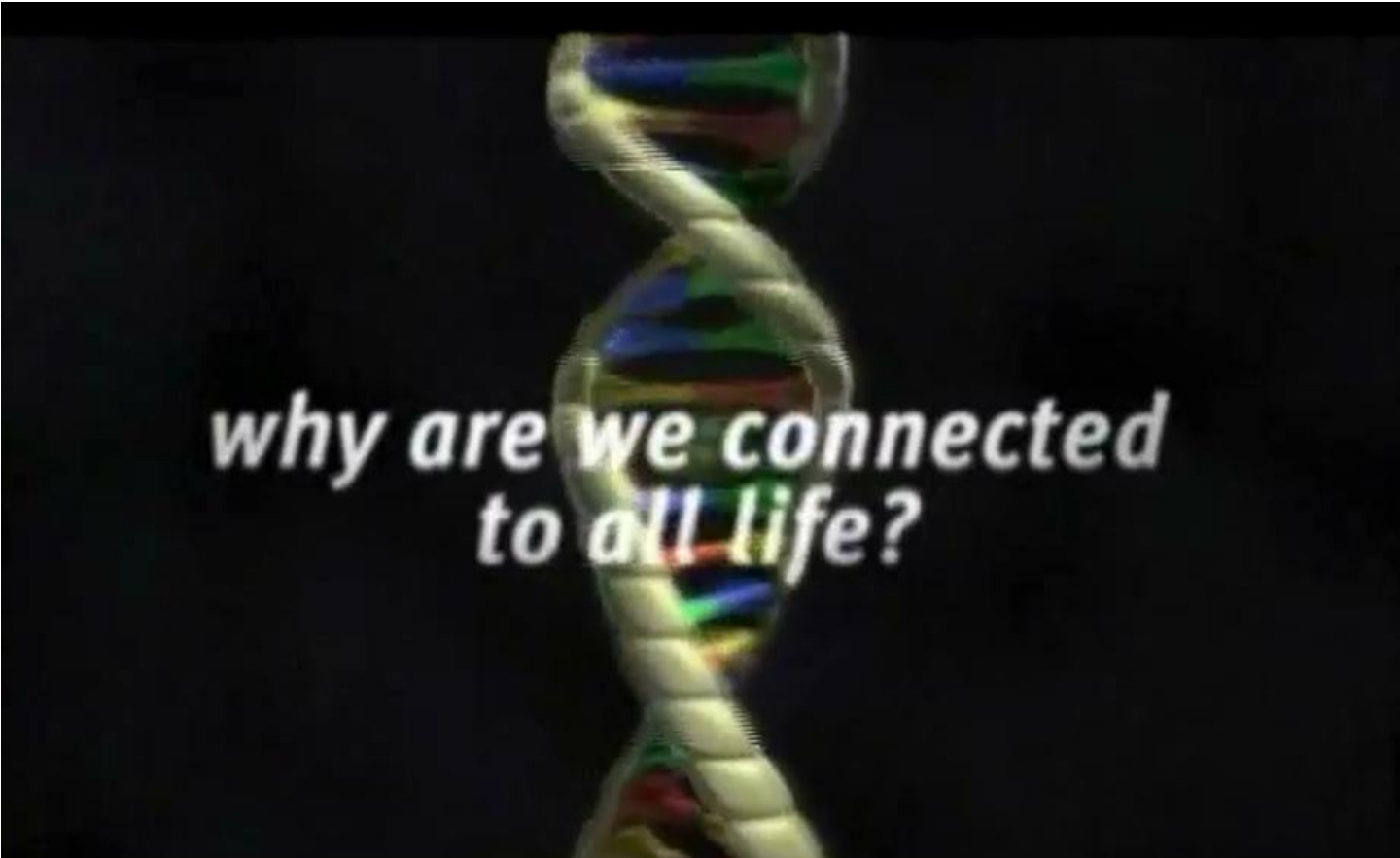


Darwin's great idea is a grand and marvelous explanation that shows us that we are united with every other form of life on this planet, and I find that an exciting; it maybe even an ennobling way to look at things.





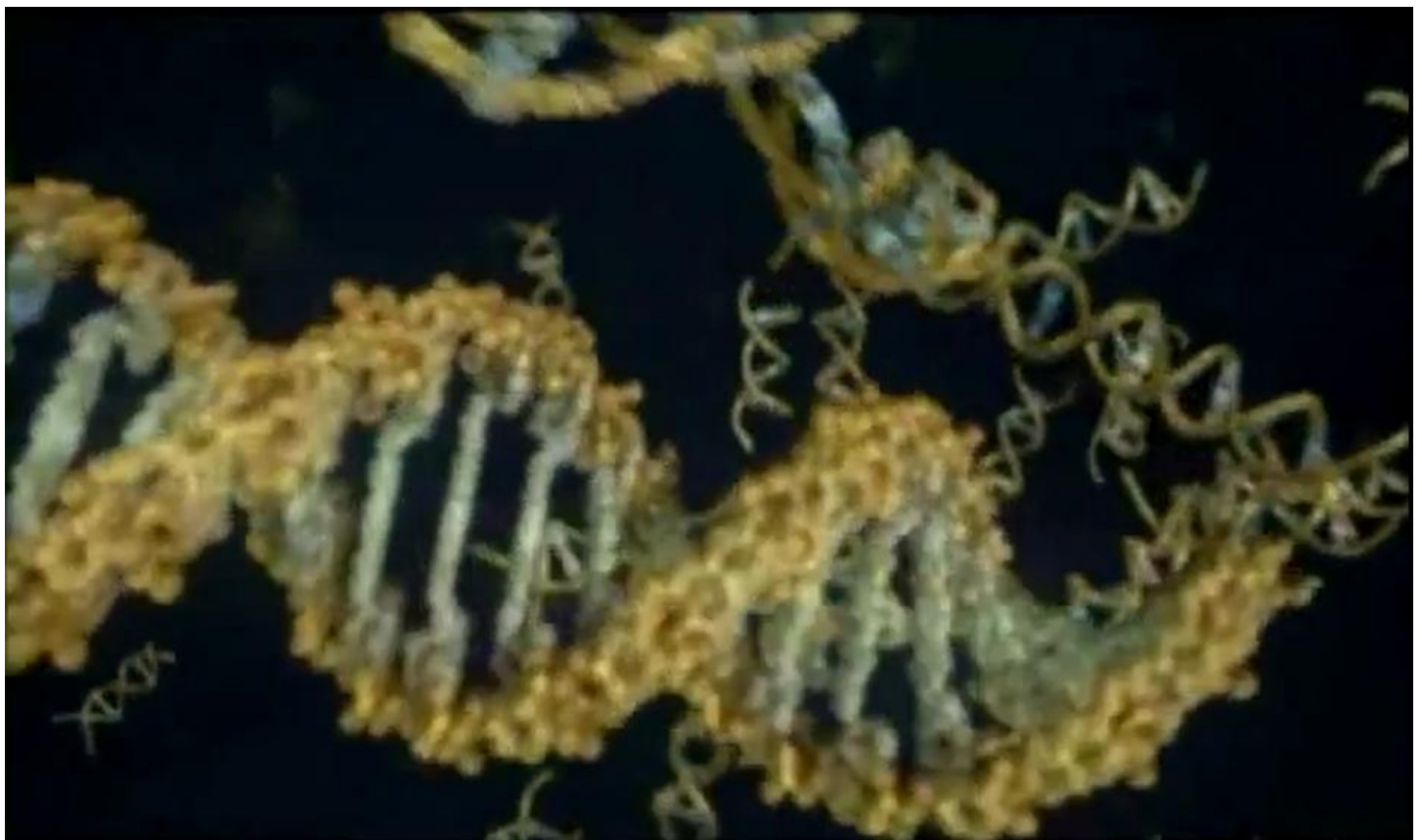
billions of years



*why are we connected
to all life?*



Charles Darwin's Tree of Life



A microscopic image showing a grid of small, dark, rectangular structures, likely representing atoms or molecules, arranged in a regular pattern. The structures are illuminated from the side, creating a sense of depth and highlighting their three-dimensional nature. The background is dark, making the structures stand out.

Atoms

A microscopic image showing a grid of larger, yellowish, rectangular structures, likely representing molecules or cells, arranged in a regular pattern. The structures are illuminated from the side, creating a sense of depth and highlighting their three-dimensional nature. The background is dark, making the structures stand out.

Molecules









Thank You!



Billy Tan: Thank you for watching.

Venerable Punnaji: Okay! Now that is the end.